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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/727,453	12/04/2003	Loyd E. East JR.	2003-IP-011867U1	7134

7590 08/17/2005  
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EXAMINER

SMITH, MATTHEW J

ART UNIT	PAPER NUMBER
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3672

DATE MAILED: 08/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/727,453

Applicant(s)

EAST ET AL.

Examiner

Matthew J. Smith

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4Dec03.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

Applicants need to supply the Serial number listed in paragraphs [0001] and [0024].

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 6-10, 13, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nierode et al. (5890536) in view of Surjaatmadja (5765642).

Nierode et al. disclose a method for producing gas from a subterranean formation containing a coal seam, comprising: drilling a vertical well bore 30 into the subterranean formation which intersects the coal seam (col. 5, line 64); fracturing the coal seam; casing 50; opposed bi-wing fractures 32 along a plane of maximum stress; and perforating the casing but not a hydrajetting tool to produce fractures and perforate the casing at a pressure which is below a pressure that will fracture the coal seam; drilling at least one horizontal well bore into the coal seam; or fracturing the coal seam along the horizontal well bore using a hydrajetting tool.

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Surjaatmadja presents a hydrajetting tool 14 to produce fractures and perforate the casing at a pressure which is below a pressure that will fracture the coal seam (col. 5, line 60); drilling at least one horizontal well bore 46 into the coal seam; and fracturing the coal seam along the horizontal well bore using a hydrajetting tool to produce opposed fractures (fig. 2).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to create the Nierode et al fractures with the Surjaatmadja tool in order to avoid using mechanical isolation of the seam (Surjaatmadja, col. 1, lines 48-49).

It would have been further obvious to provide casing in the horizontal well bore and perforate the casing with the hydrajetting tool since it is well known to complete horizontal well bores with casing and subsequently perforate the horizontal casing in order to produce the well.

Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nierode et al. in view of Surjaatmadja as applied to claim 1 above, and further in view of Zupanick (6280000).

The combination discloses bi-wing fractures in a coal seam via hydrajetting but not removing water, or logging the well bore.

Zupanick teaches removing water (col. 1, line 51) and logging (col. 1, line 60) a coal seam 12 in a horizontal well bore.

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It would have been obvious to a person having ordinary skill in the art at the time the invention was made to remove water and log the Nierode et al. hydrajetted well, as taught by Zupanick, in order to drain the coal seam (Zupanick, col. 1, line 63) and identify the coal seam (Zupanick, col. 1, line 60).

Claims 11, 12, and 15-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nierode et al. in view of Surjaatmadja and Zupanick.

Nierode et al. disclose a method for producing gas from a subterranean formation containing a coal seam, comprising: drilling a vertical well bore 30 into the formation which intersects the coal seam (col. 5, line 64); fracturing the coal seam; casing 50; opposed bi-wing fractures 32 substantially along a plane of maximum stress; and perforating the casing but not a hydrajetting tool to produce fractures and perforate the casing at a pressure which is below a pressure that will fracture the coal seam; drilling at least one horizontal well bore into the coal seam, or fracturing the coal seam along the horizontal well bore using a hydrajetting tool.

Surjaatmadja presents a hydrajetting tool 14 to produce fractures and perforate the casing at a pressure which is below a pressure that will fracture the coal seam (col. 5, line 60); drilling at least one horizontal well bore 46 into the coal seam; and fracturing the coal seam along the horizontal well bore using a hydrajetting tool to produce opposed fractures.

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Zupanick teaches removing water (col. 1, line 51) and logging (col. 1, line 60) a coal seam 12 in a horizontal well bore.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to create the Nierode et al. fractures with the Surjaatmadja tool in order to avoid mechanical isolation (Surjaatmadja, col. 1, lines 48-49) plus to remove water and log the Nierode et al. hydrajetted well, as taught by Zupanick, in order to drain the coal seam (Zupanick, col. 1, line 63) and identify the coal seam (Zupanick, col. 1, line 60), respectively.

It would have been further obvious to provide casing in the horizontal well bore and perforate the casing with the hydrajetting tool since it is well known to complete horizontal well bores with casing and subsequently perforate the horizontal casing in order to produce the well.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew J. Smith whose telephone number is 571-272-7034. The examiner can normally be reached on T-F, 9-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David J. Bagnell can be reached on 571-272-6999. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306 or 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



David Bagnell  
Supervisory Patent Examiner  
Art Unit 3672

MJS *MJS*  
2 August 2005